

Work Order ID 153227 -2

Friday, November 11, 2016 8:30:36 AM

153227

Page 1

Item ID: D4012-1

Revision ID:

Item Name: Cushion

Start Date: 11/11/2016 Start Qty: 600.00

Required Date: 12/2/2016 Req'd Qty: 600.00

Reference:

Approvals: Process Plan: U Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Accept

N900040100

Setup

Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Run

Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4012	E								

100

0.00

100

Purchasing

Purchasing

Memo

ISSUE P/O: 34292
SUPPLIER : GARLAND MANUFACTURING COMPANY
MANUFACTURE AS PER DWG D4012-1

C OF C IS REQUIRED

0.00

600 NOV 11 2016

DAS
13
9-39

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.00

600X SD16-12-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Friday, November 11, 2016 8:30:35 AM

Page 1

Work Order ID: 153227

153227

Parent Item: D4012-1

D4012-1

Parent Item Name: Cushion

Start Date: 11/11/2016

Required Date: 12/2/2016

Start Qty: 600.00

Required Qty: 600.00

Comments: IPP RevA: New issue 09.10.28 DD verified by:JLM IPP RevB:
revA as per dwg 09.11.18 DD verified by:JLM IPP Rev:C 11.01.10
as per dwg Rev.B DD verified by:JLM IPP REV:D 16-11-10 AS PER
DWG REV.E DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4012-1P		Purchased		No			Each	0.0000		600			

D4012-1P
Cushion

600 x SP/16-12-22

NOV 15 2016

DQA: _____ Date: _____



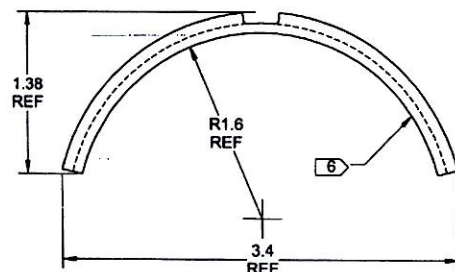
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

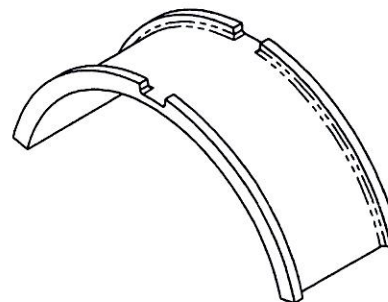
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coor. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

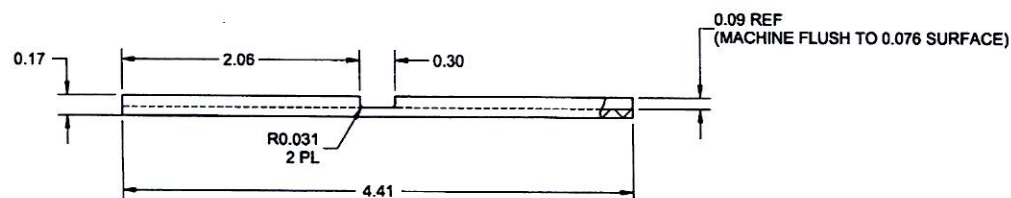
Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						



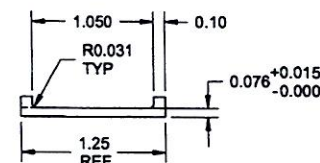
D4012-1 CUSHION
(MAKE FROM D4012-1F)
(COLD FORMED DURING INSTALLATION, DIMS REFERENCE ONLY)



W/D 153227



D4012-1F FLAT CUSHION 1



NOTES:

- 1) MATERIAL: MAKE FROM D4287-3 OR VIRGIN GAR-DUR UHMW-PE, NATURAL, (GARLAND MANUFACTURING COMPANY)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

RELEASED
2016-11-09
EGW-668

E	ADD PURCHASING OPTION- NEW SUPPLIER, CIR 18-69	DB	16.05.09
D	ADDED -3 SEE PAR 15-458.	AJS	15.09.17
C	ADD 0.30 NOTCH, 2 PL, ADD COLD FORM NOTE, REF DIMS FOR D4012-1 REASON: PAR 14-331, NCR 14-3521	DB	14.09.22
B	CHANGED RAW MATERIAL TO REDUCE MANUFACTURING COSTS: PART NOW MACHINED FLAT AND SHAPED WITH RADIUS. REF: PAR10-29	MB	10.12.07
A	NEW ISSUE	MB	09.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	ML	DRAWING NO.	REV. E
MFG. APPR.	DD	D4012	SHEET 1 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	CUSHION	NTS
DATE	16.05.09	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED

DQA: _____ Date: _____



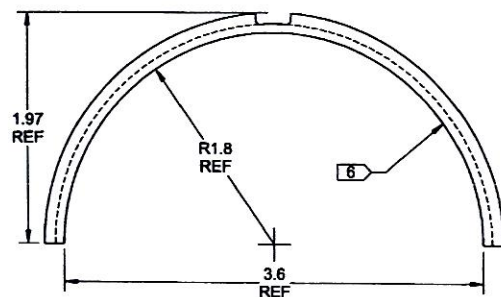
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

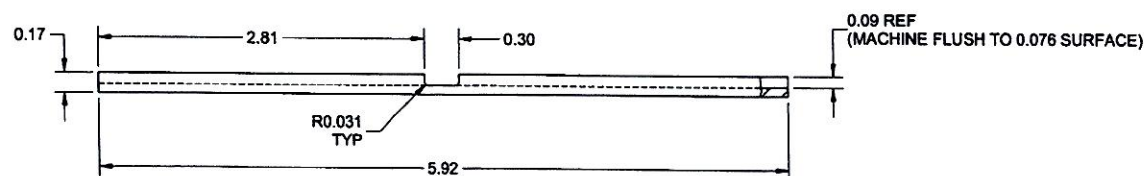
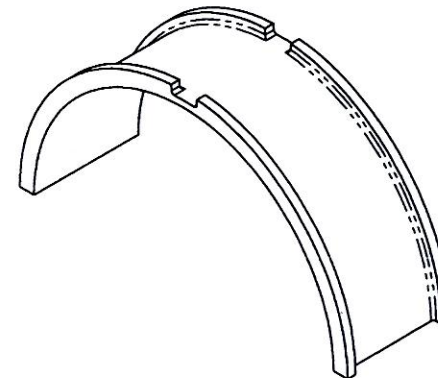
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

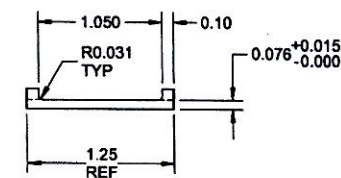
Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						



D4012-3 CUSHION
(MAKE FROM D4012-3F)
(COLD FORMED DURING INSTALLATION, DIMS REFERENCE ONLY)



D4012-3F FLAT CUSHION



NOTES:

- 1) MATERIAL: MAKE FROM D4287-3 OR VIRGIN GAR-DUR UHMW-PE, NATURAL, (GARLAND MANUFACTURING COMPANY)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.02 lbs

RELEASED
2016-11-09

APPROVED

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	DRAWING NO.	REV. E
MFG. APPR.	DD	D4012	SHEET 2 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	CUSHION	NTS
DATE	16.05.09	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coor. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34292**

Purchase Order Date 11/11/2016

PO Print Date 11/15/2016

Page Number 1 of 4

Order From :
GARLAND MANUFACTURING CO.
P.O. BOX 538
SACO, MAINE 04072
USA

VU-GMC01

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Contact Name
Vendor Phone 207-283-3693

Ship To Contact
Ship To Phone
Ship Via: FedEx Overnight collect
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4012-1F AS PER DWG D4012 REV. E B153227	Cushion	12/5/2016 Yes 12/5/2016	FN	600.00 Each	\$2.64	\$1,584.00
Line Total:							\$1,584.00
2	D4012-3F AS PER DWG D4012 REV. E B153228	Cushion	12/5/2016 Yes 12/5/2016	FN	50.00 Each	\$2.64	\$132.00
Line Total:							\$132.00
3	D4061-1F AS PER DWG D4061 REV. D B153230	Ski Cushion	12/5/2016 Yes 12/5/2016	FN	300.00 Each	\$3.21	\$963.00

Note:

11/15/2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
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OTHER : _____					

Invoice

FROM

Tax ID/EIN/VAT No.:

Contact Name: Mal Parsons

Garland Mfg

55 Ind'l Park Rd

Saco, ME 040721804

United States

Phone: 2072833693

SHIP TO

Tax ID/VAT No.:

Contact Name: ATTN: LINDA LACELLE

DART AEROSPACE

1270 ABERDEEN ST

HAWKESBURY, ON K6A1K7

Canada

Phone: 6136322577

Waybill Number: 1Z0194440456214597

Shipment ID: 019444KDVSZ



Date: 16/DEC/2016

Invoice No.: PO34292

Purchase No.: 182270

Terms of Sale (Incoterm):

Reason for Export: Sale

SOLD TO INFORMATION

Tax ID/VAT No.:

Contact Name:

Same as Ship To

Phone:

Units	U/M	Description of Goods/Part No.	Harm. Code	C/O	Unit Value	Total Value
600	NMB	D4012-1F	392190	US	2.64	1,584.00 USD
50	NMB	D4012-3F	392190	US	2.64	132.00 USD
300	NMB	D4061-1F	329190	US	3.21	963.00 USD
60	NMB	D4212-1F	329190	US	3.28	196.80 USD
120	NMB	D4953-1F	329190	US	3.25	390.00 USD
200	NMB	D5123-1F	329190	US	1.16	232.00 USD
400	NMB	D5123-3F	329190	US	1.02	408.00 USD
60	NMB	D5123-5F	329190	US	1.35	81.00 USD
100	NMB	D5123-7F	329190	US	0.96	96.00 USD

SP 16-12-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coor. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Invoice

Shipment ID: 019444KDVSZ

Additional Comments:

Declaration Statement:

I hereby certify that the information on this invoice is true and correct and the contents and value of this shipment is as stated above.



Shipper

12.16.11

Date

Invoice Line Total:	4,082.80
Discount/Rebate:	0.00
Invoice Sub-Total:	4,082.80
Freight:	0.00
Insurance:	0.00
Other:	0.00
Total Invoice Amount:	4,082.80

Total Number of Packages: 2 Currency: USD
Total Weight: 45.8 LBS

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited.

SP/6-12-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

PAPERWORK REDUCTION ACT STATEMENT: An agency may not conduct or sponsor an information collection and a person is not required to respond to this information unless it displays a current valid OMB control number and an expiration date. The control number for this collection is 1651-0098. The estimated average time to complete this application is 15 minutes. If you have any comments regarding the burden estimate you can write to U.S. Customs and Border Protection, Office of Regulations and Rulings, 799 9th Street, NW., Washington DC 20229.

NORTH AMERICAN FREE TRADE AGREEMENT CERTIFICATE OF ORIGIN INSTRUCTIONS

For purposes of obtaining preferential tariff treatment, this document must be completed legibly and in full by the exporter and be in the possession of the importer at the time the declaration is made. This document may also be completed voluntarily by the producer for use by the exporter. Please print or type:

- FIELD 1:** State the full legal name, address (including country) and legal tax identification number of the exporter. Legal taxation number is: in Canada, employer number or importer/exporter number assigned by Revenue Canada; in Mexico, federal taxpayer's registry number (RFC); and in the United States, employer's identification number or Social Security Number.
- FIELD 2:** Complete field if the Certificate covers multiple shipments of identical goods as described in Field #5 that are imported into a NAFTA country for a specified period of up to one year (the blanket period). "FROM" is the date upon which Certificate becomes applicable to the good covered by the blanket Certificate (it may be prior to the date of signing this Certificate). "TO" is the date upon which the blanket period expires. The importation of a good for which preferential treatment is claimed based on this Certificate must occur between these dates.
- FIELD 3:** State the full legal name, address (including country) and legal tax identification number, as defined in Field #1, of the producer. If more than one producer's good is included on the Certificate, attach a list of additional producers, including the legal name, address (including country) and legal tax identification number, cross-referenced to the good described in Field #5. If you wish this information to be confidential, it is acceptable to state "Available to CBP upon request". If the producer and the exporter are the same, complete field with "SAME". If the producer is unknown, it is acceptable to state "UNKNOWN".
- FIELD 4:** State the full legal name, address (including country) and legal tax identification number, as defined in Field #1, of the importer. If the importer is not known, state "UNKNOWN"; if multiple importers, state "VARIOUS".
- FIELD 5:** Provide a full description of each good. The description should be sufficient to relate it to the invoice description and to the Harmonized System (H.S.) description of the good. If the Certificate covers a single shipment of a good, include the invoice number as shown on the commercial invoice. If not known, indicate another unique reference number, such as the shipping order number.
- FIELD 6:** For each good described in Field #5, identify the H.S. tariff classification to six digits. If the good is subject to a specific rule of origin in Annex 401 that requires eight digits, identify to eight digits, using the H.S. tariff classification of the country into whose territory the good is imported.
- FIELD 7:** For each good described in Field #5, state which criterion (A through F) is applicable. The rules of origin are contained in Chapter Four and Annex 401. Additional rules are described in Annex 703.2 (certain agricultural goods), Annex 300-B, Appendix 6 (certain textile goods) and Annex 308.1 (certain automatic data processing goods and their parts). **NOTE: In order to be entitled to preferential tariff treatment, each good must meet at least one of the criteria below.**

Preference Criteria

- A** The good is "wholly obtained or produced entirely" in the territory of one or more of the NAFTA countries as referenced in Article 415. **Note: The purchase of a good in the territory does not necessarily render it "wholly obtained or produced".** If the good is an agricultural good, see also criterion F and Annex 703.2. (Reference: Article 401(a) and 415)
- B** The good is produced entirely in the territory of one or more of the NAFTA countries and satisfies the specific rule of origin, set out in Annex 401, that applies to its tariff classification. The rule may include a tariff classification change, regional value-content requirement, or a combination thereof. The good must also satisfy all other applicable requirements of Chapter Four. If the good is an agricultural good, see also criterion F and Annex 703.2. (Reference: Article 401(b))
- C** The good is produced entirely in the territory of one or more of the NAFTA countries exclusively from originating materials. Under this criterion, one or more of the materials may not fall within the definition of "wholly produced or obtained", as set out in article 415. All materials used in the production of the good must qualify as "originating" by meeting the rules of Article 401(a) through (d). If the good is an agricultural good, see also criterion F and Annex 703.2. Reference: Article 401(c).
- D** Goods are produced in the territory of one or more of the NAFTA countries but do not meet the applicable rule of origin, set out in Annex 401, because certain non-originating materials do not undergo the required change in tariff classification. The goods do nonetheless meet the regional value-content requirement specified in Article 401(d). This criterion is limited to the following two circumstances:
1. The good was imported into the territory of a NAFTA country in an unassembled or disassembled form but was classified as an assembled good, pursuant to H.S. General Rule of Interpretation 2(a), or
 2. The good incorporated one or more non-originating materials, provided for as parts under the H.S., which could not undergo a change in tariff classification because the heading provided for both the good and its parts and was not further subdivided into subheadings, or the subheading provided for both the good and its parts and was not further subdivided.

NOTE: This criterion does not apply to Chapters 61 through 63 of H.S. (Reference: Article 401(d))

- E** Certain automatic data processing goods and their parts, specified in Annex 308.1, that do not originate in the territory are considered originating upon importation into the territory of a NAFTA country from the territory of another NAFTA country when the most-favored-nation tariff rate of the good conforms to the rate established in Annex 308.1 and is common to all NAFTA countries. (Reference: Annex 308.1)
- F** The good is an originating agricultural good under preference criterion A, B, or C above and is not subject to a quantitative restriction in the importing NAFTA country because it is a "qualifying good" as defined in Annex 703.2, Section A or B (please specify). A good listed in Appendix 703.2B.7 is also exempt from quantitative restrictions and is eligible for NAFTA preferential tariff treatment if it meets the definition of "qualifying good" in Section A of Annex 703.2. **NOTE 1: This criterion does not apply to goods that wholly originate in Canada or the United States and are imported into either country. NOTE 2: A tariff rate quota is not a quantitative restriction.**

FIELD 8: For each good described in Field #5, state "YES" if you are the producer of the good. If you are not the producer of the good, state "NO" followed by (1), (2), or (3), depending on whether this certificate was based upon: (1) your knowledge of whether the good qualifies as an originating good; (2) your reliance on the producer's written representation (other than a Certificate of Origin) that the good qualifies as an originating good; or (3) a completed and signed Certificate for the good, voluntarily provided to the exporter by the producer.

FIELD 9: For each good described in field #5, where the good is subject to a regional value content (RVC) requirement, indicate "NC" if the RVC is calculated according to the net cost method; otherwise, indicate "NO". If the RVC is calculated over a period of time, further identify the beginning and ending dates (MM/DD/YYYY) of that period. (Reference: Article 402.1, 402.5).

FIELD 10: Identify the name of the country ("MX" or "US" for agricultural and textile goods exported to Canada; "US" or "CA" for all goods exported to Mexico; or "CA" or "MX" for all goods exported to the United States) to which the preferential rate of CBP duty applies, as set out in Annex 302.2, in accordance with the Marking Rules or in each party's schedule of tariff elimination.

For all other originating goods exported to Canada, indicate appropriately "MX" or "US" if the goods originate in that NAFTA country, within the meaning of the NAFTA Rules of Origin Regulations, and any subsequent processing in the other NAFTA country does not increase the transaction value of the goods by more than seven percent; otherwise indicate "JNT" for joint production. (Reference: Annex 302.2)

FIELD 11: This field must be completed, signed, and dated by the exporter. When the Certificate is completed by the producer for use by the exporter, it must be completed, signed, and dated by the producer. The date must be the date the Certificate was completed and signed.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				



Industrial Plastics
Ultra-High Molecular Weight Polyethylene

55 Industrial Park Road
POB 538
Saco, Maine 04072

Specialty Striking Tools
Garland Rawhide Hammers & Mallets

PH: 207/283-3693
FX: 207/283-4834
<http://www.garlandmfg.com>

Dart Aerospace
Attn: Linda Lacelle
1270 Aberdeen St.
Hawkesbury, ON K6A1K7
Re: Quality Clauses A017 and A026
Date: December 16, 2016

Linda:

A026

Please be advised that Garland Manufacturing, located in Saco, Maine, USA, hereby certifies that the material provided by this company for your PO 34292 meets or exceeds ASTM Specification D-4020-05a, the current ASTM specification for Ultra-High Molecular Weight Polyethylene; also known as UHMW or UHWM-PE. Garland Mfg. Company only processes UHMW-PE material at the upper end of the molecular weight range. Our virgin GAR-DUR® UHMW plastic is made from resin with an I.V. of 24 and above with a minimum molecular weight of 4.2 million.

A017

Your parts were produced from the following Resin Lots:

Braskem UTEC6540G resin lot # BADAFC028E, See attached Quality Certificate #0938611/2016

Best Regards,

James Garland
Garland Manufacturing Company
jgarland@garlandmfg.com
800/727-1900 x 45

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY								
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								



GARLAND MANUFACTURING
COMPANYBILL KRAMER
55 INDUSTRIAL PARK RD
SACO ME 04072
USA

Quality certificate

Quality certificate number
0938611/2016
Date
08/24/2016
Order
25409 / 08/05/2016
Delivery item/date
801551026 900002 / 08/24/2016
Order item/date
3904292 000020 / 08/05/2016
Customer
3000003954
Invoice
Truck ID

Material code
UTEC6540G-UHMWPE

Lot (batch): BADAFC028E / Validity: 09/05/2018
Quantity: 27,520.000 LB / Production Date: 03/09/2016

Property	Unity	Result	Min Value	Max Value	Method.
Molecular Weight (10^6 g/mol)	g/mol	7.6	6.8	9.7	
Bulk Density	g/cm ³	0.43	0.43	0.50	ASTM D 1895-03
Average Particle Size	μ m	227	185	225	ASTM D 1921
I.V. Average	dL/g	28.0	26.0	33.0	ASTM D 4020-05

We confirm the supply as requested
Quality Control Manager: Natanael Carreira
CRQ nº 04200878 / 4ª Region

For any questions about our products, please e-mail to pe-pp@braskem.com.br.

This certificate is automatically printed and is valid without signature

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
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				Completed By					
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							